



## CTC Notes

### Joint Readiness Training Center (JRTC)

#### Sapper Platoon Sergeant: Operating in a Lightfighter's Tactical Environment

By Sergeant First Class Anthony S. Sparks  
and Captain Jason D. Williams

*"NCOs, the backbone of the Army, train, lead, and take care of enlisted soldiers. They receive their authority from their oaths of office, law, rank structure, traditions, and regulations. This authority allows them to direct soldiers, take actions required to accomplish the mission, and enforce good order and discipline. NCOs represent officer leaders. They ensure their subordinates, along with their personal equipment, are prepared to function as effective unit and team members. While commissioned officers command, establish policy, and manage resources, NCOs conduct the Army's daily business."*

Field Manual (FM) 22-100, *Army Leadership*

A prevalent trend at JRTC among rotational engineer units is the platoon sergeant (PSG) not understanding his role and exercising his authority to best influence the mission and ensure its accomplishment. The bottom line is that the PSG is not getting into the fight and making a difference. In a light environment, the engineer platoon habitually associates with an infantry task force. Often, the three sapper squads are task-organized in support of company maneuver teams and operate independently from the platoon headquarters element. With the expectation of having no subordinates upon task organization, the sapper PSG is faced with a constant dilemma—knowing his organizational role and knowing where his leadership is needed most in the tactical environment. The following paragraphs address this concern and include observations and feedback from the engineer observer-controllers (O-Cs) at JRTC.

#### Platoon Sergeant

The PSG is the senior noncommissioned officer (NCO) at the platoon level. He is the principal advisor and mentor to the platoon leader (PL). The PSG generally has 12 to 18 years of

military experience and is rightfully expected to bring that experience and mentorship to bear and influence quick, accurate decisions that are in the best interest of the mission and the soldier. The connection between the chain of command and the NCO support channel is the senior NCO. Officers issue orders through the chain of command, but the senior NCO must know and understand the orders to issue effective implementing instructions through the NCO support channel. The role of the PSG was best defined in TC 22-6 (replaced by FM 7-22.7 *The Army Noncommissioned Officer Guide*): "When the platoon leader is present, the platoon sergeant is the primary assistant and advisor, with the responsibility of training and caring for soldiers. In the absence of the platoon leader, the platoon sergeant takes charge of the platoon." This serves as a guideline for the two basic combat functions of the sapper PSG: PL/assistant platoon leader (APL) and assistant task force engineer.

#### Platoon Leader/Assistant Platoon Leader

As the PL executes his duties as task force engineer participating in the maneuver task force military decision-making process (MDMP), the PSG must take a proactive approach in conducting parallel mission planning and preparation with his subordinate squad leaders. This involves the active supervision and execution of platoon troop leading procedures (TLPs). With the PL's intent and the receipt of developing mission-critical information, the PSG can—

- Issue warning orders (WARNORDS) (as detailed as possible).
- Make a tentative plan; assign critical responsibilities to facilitate mission preparation, precombat checks (PCCs), and rehearsals.
- Initiate necessary movement; coordinate task organization changes or movement to a new patrol base or assembly area.
- Conduct reconnaissance (map, route, objective).
- Complete the plan; implement changes based on the results of the reconnaissance and the approved scheme of engineer operations from the MDMP.
- Issue the operation order (OPORD), if tasked by the PL.
- Supervise and assess; conduct leader precombat inspections (PCIs) and monitor rehearsals at the squad, platoon, and combined arms levels.

Under the factors of mission, enemy, terrain, troops, time available, and civilian considerations (METT-TC), the maneuver commander's guidance, and/or the PL's instructions, the PSG must be assigned a distinct role for the execution phase of the operation. This may include serving as a PL/APL in a platoon-level operation, maneuvering with an engineer main effort squad, or battletacking in the task force tactical operations center (TOC) as the assistant task force engineer. The goal is to find the combination and balance of engineer

leadership that best supports the task force and allows the engineer platoon to successfully accomplish the mission.

### Assistant Task Force Engineer

The sapper PSG inherently must share the responsibility of manning the task force engineer cell (TFEC). In the absence of the PL, the PSG serves as the engineer Battlefield Operating System (BOS) representative on the task force battle staff. His duties include battletracking on current operations; maintaining communications and reporting with higher and subordinate headquarters; and managing critical engineer information—such as enemy and friendly minefields, route status within the area of responsibility, and combat power. The PSG must maintain an excellent situational awareness and possess a strong knowledge of engineer systems, their capabilities and doctrinal employment, and tactics. Ultimately, he must be confident in his ability to execute his role as an engineer BOS advisor to senior maneuver leadership.

### Observer-Controller Observations

- The majority of engineer PSGs rotating through the JRTC are “fast-tracking” staff sergeants (with 8 to 12 years of military experience) who excelled as squad leaders in a tactical environment but are struggling to fulfill the responsibilities of a competent PSG. They have little to no experience in a TOC, do not possess the engineer doctrinal knowledge and understanding of task force-level operations, and lack the confidence and credibility with the maneuver community to be a senior-level advisor.
- PSGs revert back to the mentality of just managing the “beans and bullets” aspect of operations. This hinders the PL’s ability to effectively manage the platoon’s timeline. The PSG has little involvement in platoon TLPs; they are left to the PL to execute upon completion of the task force MDMP or pushed down to the squad leaders for decentralized execution.
- A “TOC avoidance” syndrome causes PSGs to push that entire responsibility on the PL. This has been attributed to a number of factors: there is no battle staff NCO course qualification; the TOC is an unfamiliar environment that might show the senior NCO’s “true” lack of experience in the presence of his maneuver brethren; the PSG simply wants to stay forward with the soldiers and where the “real” fight is.
- The PSG rarely conducts battlefield circulation. This impacts his ability to gain the “pulse” of the platoon and implement action when needs are not being addressed. Soldier welfare and logistic concerns are often overlooked when squads are task-organized away from the platoon headquarters in various command/support relationships.
- The PSG often has a poor relationship with the PL. The PSG shows little patience in coordinating with and mentoring the junior lieutenant who has an incredible dual

responsibility as PL and task force engineer (often assigned with less than 18 months of military service). This severely strains the platoon’s ability to plan, prepare, and execute, and it ultimately impacts the unit’s ability to support the task force and accomplish the mission.

### Summary

The PSG is the key assistant and advisor to the PL—both as a task force engineer in the TOC and forward with the platoon on the battlefield. In the absence of the PL, the PSG commands the platoon and acts as the senior engineer advisor to the task force. He is the driving force behind the platoon’s prebattle preparation, and he must be ready to lead from the front when called upon. The PL and PSG must work together effectively to find a balance of leadership and position themselves accordingly to fight and win on the battlefield.

The following checklist of responsibilities serves as a guide for the sapper PSG when determining where he is needed most to influence operations and impact mission accomplishment:

- Assist and coordinate with the PL. The PSG should also be prepared to assume the PL’s duties, as required.
- Execute TLPs and briefing orders in the absence of the PL.
- Become involved early in the planning process to provide quality control in the execution of engineer missions and logistical operations.
- Execute duties as the assistant task force engineer has directed.
- Check on the welfare of the soldier as a second set of eyes for the PL.
- Enforce standards and the tactical standard operating procedure.
- Supervise platoon logistics, maintenance, communications, field hygiene, and medical evacuation operations.
- Lead, supervise, inspect, observe, and assess matters that the PL designates.

*Sergeant First Class Sparks is a light engineer platoon senior NCO observer-controller. Previous assignments include PSG and squad leader, Charlie Company, 307th Engineer Battalion (Airborne); operations sergeant, 554th Engineer Battalion; and squad leader, 562d Engineer Company, 172d Infantry Brigade (Separate) and Alpha Company, 20th Engineer Battalion (Corps) (Wheeled).*

*Captain Williams is a light engineer platoon senior observer-controller. Previous assignments include commander, Bravo Company, 65th Engineer Battalion (Light); brigade engineer, 2d Brigade, 25th Infantry Division; adjutant, executive officer, and platoon leader, 588th Engineer Battalion (Mechanized), 4th Infantry Division.*

## National Training Center (NTC)

### Simultaneous Explosive Reductions

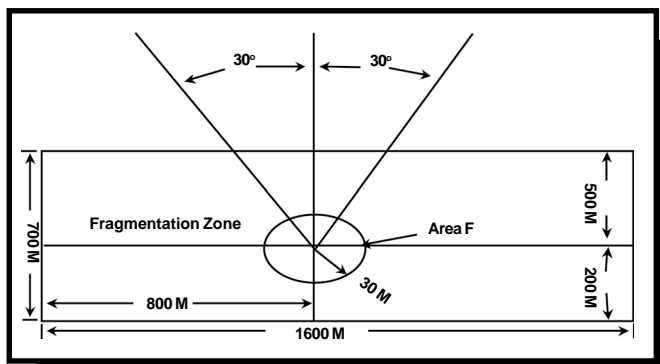
By Captain Kirk Gibbs

Live-fire operations at NTC are an excellent training opportunity for engineers. NTC is the only training environment in the continental United States where units may regularly fire the M58 high-explosive mine-clearing line charge (MICLIC). Often, reverse planning based on the overwatching enemy drives the unit to conduct a brigade-level breaching operation. This requires two lanes through a complex obstacle in order to assault a task force onto the objective. Units often choose to weight the brigade's breach force with at least two MICLICs to quickly create two lanes using explosive reduction techniques. This raises the question, "Should we reduce at two points of breach simultaneously?" The MICLIC surface danger zone (SDZ), as well as the unit's ability to conduct rehearsals, should drive this decision. The answer to the question can be "yes." However, units should consider the following points when planning and preparing for simultaneous explosive reductions:

#### MICLIC SDZ

The NTC-approved MICLIC SDZ (shown below) is based on Department of the Army (DA) Pamphlet (Pam) 385-63, *Range Safety*, with each distance in the fragmentation zone rounded up to the nearest 100 meters. The SDZ is divided into Area F; the 30-meter radius around the MICLIC; and the fragmentation zone of 500 meters forward, 200 meters to the rear, and 800 meters to each side of the MICLIC. DA Pam 385-63 states who can be in Area F and the fragmentation zone when the MICLIC is fired:

- Only the MICLIC, armored towing vehicle, and M1 tank with mine-clearing blade or roller (if the unit chooses to fire over a tank) may remain in Area F.
- Elements of the breach force and support force may be inside the fragmentation zone but must be behind the MICLIC firing line outside of Area F and must be "buttoned up."



#### Points of Breach

With these mandatory control measures, units that conduct simultaneous explosive reductions must ensure that points of breach are at least 800 meters apart. The reasons for this are twofold:

- One enemy artillery-delivered scatterable minefield (200 by 800 meters) can close two lanes if they are not at least 800 meters apart.
- In the event of a misfire on one lane, the unit can continue to create the second lane by dismounting engineers to mark the lane and sending the assault force through to the farside objective. In every type of misfire procedure for a rocket or charge, the unit must wait 30 minutes before approaching the launcher or charge, if it has been deployed. This means that within the SDZ, all vehicles must maintain a buttoned-up status, and no vehicles can move forward of the MICLIC firing line.

#### Summary

None of these procedures are specific to NTC and the NTC exercise operating procedures. Leaders should consider them during all phases of the operation whether it is a training or combat operation. To adequately synchronize any combined arms breaching operation, units must conduct full-force or, at the very least, reduced-force rehearsals where clearance of the SDZ and reporting procedures are adequately practiced. This is vital to successfully reducing two lanes through an enemy obstacle and maintaining the momentum of the brigade's attack.

The Sidewinder MICLIC Guide is available at <http://www.irwin.army.mil/sidewinder/MICLIC%20WEB%20PAGE/index.htm>. To obtain a copy of this guide in a compact disc format, e-mail [sw04t@irwin.army.mil](mailto:sw04t@irwin.army.mil) and provide a valid unit address.

POC is Captain Kirk Gibbs (SW03B), (760) 380-5151 or DSN 470-5151, or e-mail [sw03b@irwin.army.mil](mailto:sw03b@irwin.army.mil).

### Explosive Ordnance Disposal Integration

By Captain Mark R. Faria

The explosive ordnance disposal (EOD) field is quickly becoming a more visible and effective force multiplier on the battlefield. The role of EOD units is changing because doctrine now allows for a company or company (-) to support a brigade combat team (BCT) (based on unexploded ordnance [UXO] threat and saturation) instead of operating at echelons above corps. Combat commanders are seeing the importance of integrating EOD units and their capabilities into mission planning. NTC is keeping pace with these changes, and current scenarios force EOD integration into the engineer battalion and BCT operations.

The EOD company commander serves as the theater EOD staff officer, as well as a company commander, in smaller operations without an EOD battalion element in theater. Current BCT-sized operations—such as in Bosnia and Kosovo and at NTC—have an EOD company or company (-) attached to the engineer battalion. This task organization must not impede the EOD commander's ability to discuss explosive-related issues with the BCT commander. It is vital that both the engineers and the BCT fully understand EOD capabilities. Two critical integration issues have emerged: the location of the EOD company (-) command post and EOD integration into the military decision-making process (MDMP).

### **EOD Command Post Location**

EOD doctrine does not direct that the EOD command post be colocated with the brigade tactical operations center (TOC), but there are many benefits to doing this. Trends at NTC show that when the EOD command post sets up in the engineer/brigade TOC, it can provide input into the risk management process, incorporate EOD capabilities into the BCT fight, participate in the MDMP, integrate with all supporting elements (such as civil affairs and military police), and battletrack to determine the extent of UXO contamination on the battlefield. Trends also show that EOD units operating out of the brigade support area (BSA) seldom receive a task and purpose in support of the BCT fight. These units fall into a reactive mode where they respond to UXO that are called in but remain reactive instead of proactive in incorporating EOD capabilities.

### **MDMP Integration**

The EOD commander has two courses of action (COA) to integrate into the MDMP:

- COA 1. The EOD commander briefs mission analysis and provides visibility of UXO threat to the BCT as well as how he can mitigate these risks. The benefit to this is that no one understands EOD capabilities and limitations better than the commander. He can immediately request additional support such as security or haul assets if required. The problem with this COA is that it takes the commander away from his unit for long periods of time. EOD companies don't have an executive officer to help run the unit or participate in the MDMP.
- COA 2. The engineer battalion S3 or assistant brigade engineer (ABE) receives input from the EOD commander before each MDMP cycle and ensures that the input is brought up to BCT level. The benefit to this COA is the experience of the field grade officer who fully understands the MDMP and the big picture of the BCT mission. Both he and the ABE also have a habitual association with the BCT and thus a better working relationship with the staff. This COA also frees up a considerable amount of time for the EOD commander to focus on his company. The limitations of

this COA are that the S3 is extremely busy, and his time in the MDMP is somewhat limited. The ABE must not become so overwhelmed in engineer specifics that he forgets about the EOD company. Both staff members must have a full understanding of EOD capabilities to ensure a realistic task and purpose for the EOD company.

### **Summary**

The BCT and engineer battalion must consider EOD capabilities in support of their mission. EOD input into the MDMP ensures the anticipatory use of assets rather than the reactive use. This process is made possible by colocating the EOD command post at the engineer and BCT TOC and allows the EOD commander to accomplish his role as the theater EOD staff officer.

For additional information on EOD operations at NTC, visit the Sidewinder Web site at <http://www.irwin.army.mil/sidewinder/index.htm>.

POC is Captain Mark R. Faria (SW18), (760) 380-5600 or DSN 470-5600, or e-mail [sidewinder18@irwin.army.mil](mailto:sidewinder18@irwin.army.mil).

### **Obstacle and Class IV/V Supply Point Support Teams**

*By Major Michael W. Rose*

Typically, BCTs have 24 to 36 hours to prepare a defense at NTC. Given the time it takes to begin engagement area development, even relying primarily on scatterable mine systems and special-purpose munitions versus conventional row mining, time is clearly the limiting factor for combat engineers and the BCT. While the BCT can use brigade-directed obstacles in conjunction with a directed scheme of maneuver to jump-start the effort and train to rapidly conduct engagement area development, the best way to increase obstacle productivity is to augment the engineers.

### **Support Teams**

The goal of augmentation is to keep as many engineers as possible executing tasks that require the most expertise instead of tasks that any soldier can execute. Units can achieve this goal by providing support at the Class IV/V supply points and emplacing minefield perimeter fence or other constructed obstacles. While many units specifically task units to provide this support in an order, adding the requirement and any additional coordinating instructions to the maneuver unit's standard operating procedures (SOP) will greatly contribute to the likelihood of getting support with the right leadership and equipment. Figures 1 and 2 on page 67 show a sample SOP for both obstacle and Class IV/V supply point support teams. These SOP cards were developed by the 8th Engineer

### CARD 445 – Class IV/V Support Team

1. PURPOSE: The Class IV/V support team is a squad-sized organization of soldiers who, on order, establish the task force (TF) Class IV/V point and reorganize the combat configured loads (CCLs) (throughput from corps level) into unit/obstacle-specific packages and/or reconfigure CCLs for back haul or follow-on missions.

2. COMPOSITION: Each ground maneuver TF will resource one Class IV/V support team consisting of the following:

- 1 NCO (for command and control [C2]) and 7 soldiers
- Sleep gear and wet and cold weather gear
- 3 five-gallon water cans
- Minimum of 1 meal, ready to eat (MRE) per soldier
- Transportation and commo for the team
- 1 Engineer NCO who will provide a Class IV/V equipment package consisting of—
  - √ 10 pair of leather work gloves
  - √ 3 pair of metal strapping cutters
  - √ 2 pair of banding crimpers
  - √ 2 pair of banding ratchet machines
  - √ 100 feet of 1/2-inch banding material
  - √ 50 each 1/2-inch banding clips

3. RESPONSIBILITIES:

BDE	TF	ENCO
<ul style="list-style-type: none"> <li>• Identify all Class IV/V support team coordinating instructions in a published operational order (OPORD)/fragmentary order (FRAGO) to TFs.</li> <li>• Include the following in the coordinating instructions:               <ul style="list-style-type: none"> <li>- Adjustments to composition</li> <li>- Linkup point and time</li> <li>- Duration of requirement</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Provide a standard Class IV/V support team (see composition above) when specified in the brigade OPORD/FRAGO.</li> <li>• Execute linkup of the Class IV/V support team as specified in the order.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate linkup with supported TF.</li> <li>• Verify or adjust the linkup point and time as required.</li> <li>• Verify that the Class IV/V support team is properly manned and equipped.</li> <li>• Efficiently employ the Class IV/V support team and report release to the TF tactical operations center.</li> </ul>

Figure 1

### CARD 447 – Obstacle Support Team

1. PURPOSE: An obstacle support team (OST) is a platoon-sized organization of soldiers trained in basic obstacle construction who, on order, move forward to a designated task force (TF) engagement area to assist and augment combat engineer soldiers constructing the TF defensive plan. OSTs will construct single-strand and triple-standard concertina fences, and dig holes for mines under the direction of an engineer NCO. These fratricide fences will support the use of both conventional and scatterable munitions.

2. COMPOSITION: Each ground maneuver TF in 3d Brigade Combat Team will resource one OST. Each OST consists of the following:

- 30 soldiers (a minimum of 3 NCOs and a designated NCOIC)
- 1 OST equipment package consisting of—
  - √ 5 picket pounders
  - √ 50 pair of leather work gloves
  - √ 5 long-handled shovels
  - √ 8 long-handled picks
- 1 water trailer or 10 five-gallon water cans
- Individual weapons, night-vision devices, sleep gear, wet and cold weather gear, and 1 meal, ready to eat (MRE) per soldier
- 2 light medium tactical vehicles (LMTVs) (for transportation)
- 1 C2 vehicle with operator
- 2 company grade officer heavy expanded-mobility tactical trucks (HEMTTs) with operators

3. RESPONSIBILITIES:

BDE	TF	ENCO
<ul style="list-style-type: none"> <li>• Identify all OST coordinating instructions in a published OPORD/FRAGO to TFs.</li> <li>• Include the following in the coordinating instructions:               <ul style="list-style-type: none"> <li>- Adjustments to composition</li> <li>- OST linkup point and time</li> <li>- Duration of requirement</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Provide a standard OST (see composition above) when specified in the brigade OPORD/FRAGO.</li> <li>• Execute linkup of OST support team as specified in the order.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate linkup with supported TF.</li> <li>• Verify or adjust the designated linkup point and time as required.</li> <li>• Verify that the OST is properly manned and equipped.</li> <li>• Employ the OST based on TF priorities.</li> <li>• Report release of the OST to the TF tactical operations center.</li> </ul>

Figure 2

Battalion, which habitually provides direct support to 3d Brigade, 1st Cavalry Division.

### Summary

Establishing support to defensive preparation in the SOP and training to efficiently use properly led and resourced teams to increase obstacle productivity is one procedure units can adopt to help defeat the greatest enemy on the battlefield—time.

*“The loss of time is irreparable in war.”*

—Napoleon

POC is Major Michael W. Rose (SW03), (760) 380-7005 or DSN 470-7005, or e-mail <sidewinder03@irwin.army.mil>.